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Economic Transformation and the Fiscal Crisis

A Critical Look at the Central European Experience of the 1990s

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The fiscal crisis in central Europe in the early 1990s is attributable mainly to increased social spending rather than to the collapse in profitability of state-owned enterprises.

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Summary findings

Barbone and Marchetti argue that traditional explanations of the fiscal crisis in reforming ex-socialist economies overlook crucial connections between key components of the deficit — particularly between reductions in spending and declines in revenues.

Almost all studies of the fiscal aspects of the transition stress the impact on the fiscal budget of the performance crisis in state-owned enterprises. Barbone and Marchetti contend that this aspect of the fiscal crisis has been overstated.

The enterprise sector's net contribution to the government budget — that is, net income from profit taxes after subtracting subsidies — has *increased* during the transition in Czechoslovakia and Poland and has not changed substantially in Hungary.

After reexamining the data, Barbone and Marchetti argue that although the fiscal crisis is certainly structural,

the main blame should be attributed to the explosion in spending (especially social spending) rather than to the crisis in revenues.

Many of the social costs of adjustment were previously hidden within the state-owned enterprises system. These social costs include unemployment benefits and the cost of supporting — through pensions or social assistance — the people displaced from the work force by the transformation.

It is important to continue reforming the tax system and tax administration — to deal with the widespread hiding of profits and cheating on taxes — but all three countries already have relatively high levels of taxation. Society in the three countries may not be willing to provide the resources required to support or extend current spending levels.

This paper — a product of the Country Operations Division, Europe and Central Asia, Country Department II — is part of a larger effort in the region to draw cross-country lessons on the issues raised by the economic transformation of former socialist economies. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Sahra Harbi, room H11-121, extension 37143 (34 pages), April 1994.

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ECONOMIC TRANSFORMATION AND THE FISCAL CRISIS
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ECONOMIC TRANSFORMATION AND THE FISCAL CRISIS

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I. INTRODUCTION

An (unfortunate) stylized fact common to virtually all reforming ex-socialist economies (RESEs) is the deep fiscal crisis in which they have found themselves after the onset of the liberalization programs (Table 1).

Table 1. Selected Economies in Transition: General Government Balance					
(in percentage of GDP)	1989	1990	1991	1992	1993
					(proj.)
Albania	-8.6	-15.4	-30.6	-22.6	-19.6
Bulgaria	..	-8.5	-4.1	-5.0	-8.0
former Czechoslovakia 1/	-2.4	0.1	-2.0	-3.6	-2.2
Hungary	-1.3	0.5	-2.5	-8.0	-7.6
Poland	-6.1	2.7	-3.7	-7.1	-2.8
Russian Republic 2/	-3.1	-6.3	-19.9	-7.4	-8.4

Sources: Ministries of Finance; World Bank staff estimates.
 1/ The figure for 1993 is the weighted average of projected Czech and Slovak Fiscal Deficits
 2/ Figures prior to 1991 refer to the USSR

To a certain extent the emergence of a fiscal crisis should not be surprising, since almost all the reforming economies have also experienced, at least during 1990-91, considerable output losses, of a magnitude not previously seen in market economies. Inasmuch as automatic stabilizers were built into the structure of the socialist public sector (at least on the revenue side), one should have expected that the recession would be accompanied by a large swing in fiscal balances. But, as

several authors have pointed out, there are more serious, structural reasons underlying the crisis, which require the policy-makers' attention.¹ At least four factors are commonly cited:

- On the revenue side, the traditional tax base of RESEs was the state-owned enterprise (SOE) sector. The sector has borne the main brunt of the recession, thus driving down tax collection, and is likely to further lose relative importance in the economy, as privatization advances and industry is downsized.
- In addition, the loss of the traditional tax base cannot easily be compensated for by increasing contributions from other sectors, since either these are traditionally difficult to tax (some services, small businesses), or the administration is not prepared to implement the new tax laws that are approved by the legislature.
- On the expenditure side, despite the relief provided by the sharp cuts in government subsidies, the central government is likely to be burdened with many of the social costs of adjustment, which were previously hidden within the SOE system. These include, in addition to unemployment benefits which are likely to be high for a number of years, the cost of supporting, either through the pension system or the social assistance system, the people displaced from the work-force by the transformation.
- Finally, the switch to positive real interest rate policies, together with the emergence of large deficits and non-bank financing of the budget, has led to increasing debt-service pressures.

These factors are present, to a certain extent, in all countries, and can therefore be used to provide partial explanations for the overall crisis. In this paper we examine relevant data for Poland, Hungary and Czechoslovakia, and assess their congruence with the theses enumerated

¹ See, for example, Tanzi (1991 and 1993).

above. We also analyze data on tax payments from the private sector in Poland, providing the first comprehensive evidence available on the subject for any RESE.

The main thesis of this paper is that traditional explanations fail to overlook crucial interconnections between key components of the deficit, particularly between the reduction in expenditures and the decrease in revenues. We therefore try to provide a somewhat different perspective. We argue that the impact on the fiscal budget of the crisis of the SOEs performance - which is stressed by almost all the studies of the fiscal aspects of transition - has been largely overestimated. Indeed, the net contribution to the government budget from the enterprise sector - defined as *profit taxes net of cross-subsidization* - has *increased* during the transition in Poland and Czechoslovakia, and has not changed substantially in Hungary. We posit that this net measure is the meaningful variable to consider in order to assess the "fiscal performance" of the enterprise sector in a socialist economy. After reexamining the data, we conclude that - while it is undoubtable that the fiscal crisis in RESEs should be considered of a structural nature - its main cause lies with the explosion of expenditures, rather than in the crisis in revenues. Within our analytical framework, we can provide a consistent explanation of the outstanding fiscal performance of Czechoslovakia vis-a-vis Poland and Hungary. In particular, the increase of social insurance expenditure - a typical development during transition - has been moderate in the former Czechoslovakia, while it has been dramatic in the other two reforming economies.

The paper is organized as follows. In the next section, we briefly review the economic mission of the public sector under socialist and market economies, and present a flow-chart model of the resulting fiscal flows among main sectors of society. We also review traditional theories regarding fiscal crisis during transition. In the third section, we present evidence - from Poland, Hungary and Czechoslovakia - supporting to a varying degree an explanation of the fiscal crisis consistent with the traditional theories (mainly revenue-based). We also provide a different perspective, and reach quite a different conclusion - that the explanation of the fiscal crisis is mainly to be found so far on the expenditure side. In section four we review the reasons for the

increase in expenditures, and review some evidence on behavior of private sector taxpayers in Poland.

II. ECONOMIC MISSION OF THE STATE AND BUDGETARY CONSEQUENCES OF ECONOMIC TRANSFORMATION.

Is there a structural reason why RESEs are experiencing severe fiscal woes? This section appeals to fundamentals. It briefly reviews the main differences in the economic mission of the state--the functions of public finance in market economies and centrally planned economies. A simple model of fiscal flows among the main institutional sectors - government, enterprises (both private and public) and households - is provided, in order to emphasize the different role of the government budget. Finally, the section discusses the likely impact on government finance of the transition to market.

II.1. Economic Mission of the State in Market and Centrally Planned Economies.

Comparing properties of fiscal systems and policies in socialist and market economies is particularly difficult - as always is the case in comparative economics - due to the radical differences in the philosophies which underlie these systems, their respective institutions and the prevailing economic behaviors.

The main traditional missions of public finance in market economies are generally categorized into (i) allocation, (ii) distribution and (iii) stabilization.² The first involves the allocation of resources between private and public goods, as well as the choice of the desired mix of public goods. The second mission empowers the public sector to seek a "fairer" income distribution than would result as the unrestrained outcome of market forces --presumably undesirable because

² The classical source on the matter is Musgrave (1959). More recent references, focused on modern theoretical justifications of the government intervention, are Stiglitz (1989) and Barr (1992). A detailed treatment of these issues goes obviously far beyond the scope of this section, which therefore draws on them very selectively.

heavily influenced by the underlying initial allocation of wealth and production factors among the population. Finally, the stabilization mission mandates the government to attempt to help the economy achieve a better performance in terms of growth, employment and inflation.

The functions of public finance in planned economies are best seen in the context of the two most important characteristics of such economies - the state ownership of the means of production and the centrally planned determination of prices.³ Due to these factors, the state makes virtually *all* the decisions related to resource allocation, production and even (with some limitations) consumption. The engine of economic activity is the central plan, which spells out in detail the physical quantities of all the intermediate and final goods to be produced in the economy. The government budget, in this context, is relegated to a minor role, that of financial appendix to the plan. It translates the physical quantities and transactions envisaged by the plan into monetary flows, given the administratively set prices.

The government action in planned economies is mainly aimed at achieving growth and equity objectives. The first objective is targeted, among other ways, by pushing resources into basic industry and other selected sectors, through heavy inter-enterprise cross subsidization. This cross-subsidization is a direct consequence of the lack of price sensitivity to excess demand conditions. Large losses can thus accumulate in enterprises that are nevertheless required to continue to provide inputs in the productive process. As we will see, this feature provides a crucial element in determining the shape of the transition.

As to the equity objective, socialist countries provide (at least in theory) their citizens with free or highly subsidized housing, transportation, health care, education and basic consumer goods, besides a generous social security system. On the other hand, the monetary wages that workers receive from government and public enterprises are low and with little variance across sectors and

³ This is, of course, a simplification. The degree to which the private sector has been given some role in production and price determination varies significantly across socialist economies and across time. An early and classical reference on these issues is Musgrave (1968), which also provides a comprehensive introduction to fiscal systems in socialist economies. A recent comprehensive source is Kornai (1992), while a more compact treatment of all these topics can be found in Chand and Lorie (1992).

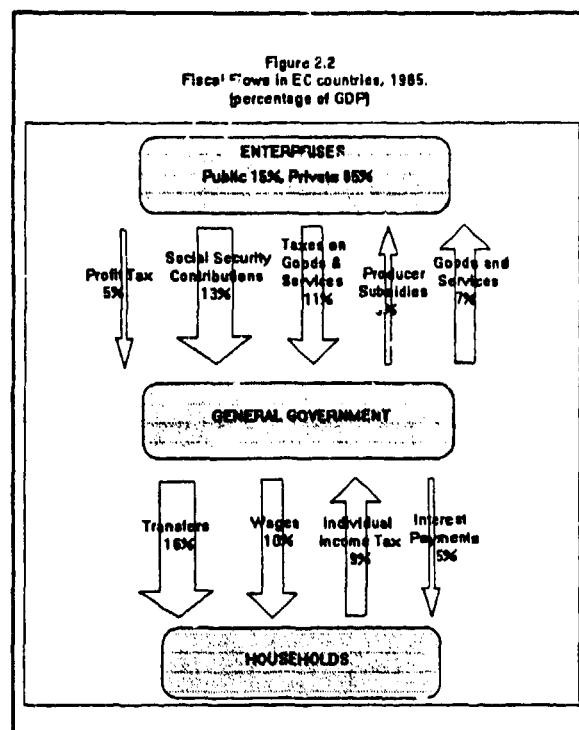
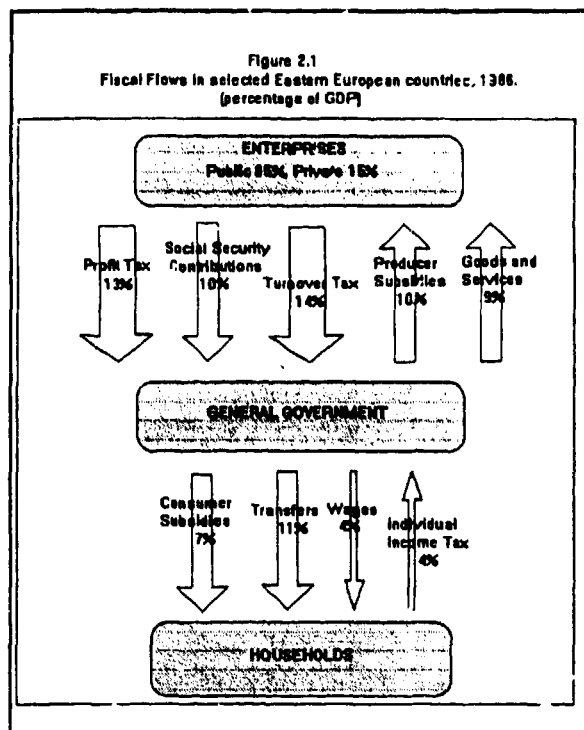
occupations, and any income from private enterprise is taxed at punitive rates. Public enterprises typically provide their employees, in addition to the wage, with a range of subsidized services, including housing, health care, consumer goods (available through enterprise-run stores), social security services and, sometime, even leisure and cultural services.

In sum, the main differences in the economic functions of general government in market and planned economies are as follows. The allocation and the distribution functions are disproportionately prevailing in the latter, and dominate the whole economy. The stabilization objective, which is a crucial element of government budget decisions in market economies, is generally not pursued through budgetary policies in socialist economies. Indeed, given the government control of production and consumption, the administrative determination of prices and the tight control of foreign trade, the budget cannot be a tool of macroeconomic policy in a traditional sense. On the other hand, the budget in planned economies plays a more important role in intermediating transactions among different sector of society, and has a considerably greater role in redirecting monetary flows among enterprises.

II.2. Fiscal Flows Among Sectors in Market-Oriented and Centrally Planned Economies.

The normative differences between the two systems translate into a fiscal "dual" - i.e the fiscal relations between sectors of society. The differences in these relations are key to explaining the magnitude of the fiscal crisis in the period of transition.

Figures 2.1 and 2.2 give a summarized diagrammatical representation of the fiscal flows between the government and the other economic agents - enterprises (both private and public) and households - in, respectively, socialist and market economies. The rest of the world and financial intermediation are left out of the picture for simplicity.



The main sources of government revenues in planned economies are profit taxes from public enterprises, sales (turnover) tax and social security contributions.⁴ In market economies, sales taxes and social security contributions are also significant, whereas profit taxes are considerably less important (in relative terms) and are replaced, as main source of revenues, by the personal income tax. Most of the tax flows are paid for or intermediated by the SOE sector in socialist economies, if nothing else because the size of the private sector - although changing across time and countries - is rather small, never having accounted for more than about 25 percent of GDP (or even being very close to zero as in Czechoslovakia).⁵

On the expenditure side, socialist economies devote a disproportionate percentage of the government budget to consumer and producer subsidies. The latter ones, combined with large profit taxes, result in a massive inter-enterprise cross-subsidization - mediated through the

⁴ On government revenues in socialist economies, see Tanzi (1991) and Gandhi and Mihaliek (1992).

⁵ See for example Komai (1992, Table 5.1).

government - which is a typical phenomenon of planned economies. In other words, the government draws resources from healthy enterprises, through the profit tax, and redistributes them to unprofitable enterprises, through producer subsidies.⁶ On the other hand, in market economies both profit tax and producer subsidies are almost negligible (in relative terms). The size of consumer subsidies in planned economies results from the socialist approach to resource allocation and income distribution. In fact, households income comes from a combination of low wages (from both government and public enterprises), sizable consumer subsidies and the in-kind enterprise compensation which was described above, in addition to government transfers.

The market-oriented pattern of government expenditure is markedly different. Consumer and producer subsidies are generally small. Households receive their income mainly through (higher) wages and sizable government transfers, which allow them to take care of their needs through market purchases. The core of economic activity and resource use is shifted from the public side of the economy to the private one.

The heavy dependence of planned economies on public enterprises for production and income generation has a number of crucial implications for the economic transformation process, some of which not easy to recognize and detect. The most obvious of these is the need for massive privatization, which has been the object of a number of studies.⁷ Another implication - more relevant for our purposes - is discussed by McKinnon (1991), Tanzi (1991) and Gandhi and Mihaliek (1992). The taxation system in RESEs was essentially *implicit*. By far, the bulk of tax revenues was collected from public enterprises, through turnover tax, profits tax and payroll tax. Almost all the operations which originate them were clearly shown on the account(s) that each public enterprise had at the Central Bank. Tax payment could be as simple as the transfer of funds from those accounts to the government account. Enforcement, for example, was not a problem. Former socialist economies therefore did not need, and indeed did not have, anything

⁶ Of course, profitability is determined to a large extent artificially through the administrative determination of relative prices. See below for more on this.

⁷ An overview of the issues is provided by Hemming (1992). For country-specific studies, see for example Lipton and Sachs (1990) on Poland, and Charap and Zemplerova (1993) on the Czech Republic.

like the complex and highly specialized tax administration that is common in market economies. However, once most of the enterprises are private and those remained state-owned are operationally independent from the government, tax collection will be a completely different matter and require a western type of tax administration.

These considerations bring us into the topic to be developed in the remaining part of this section, i.e. the impact of economic transformation on the government budget.

II.3. The Budgetary Consequences of Transition.

We start by analyzing the budgetary implications of transition on the revenue side.

Most observers agree that a sizeable decrease of tax revenues is likely to accompany economic transformation of socialist countries.⁸ This is due to several factors. One is mentioned above, i.e. the need of building - almost from scratch - an administration able to cope with the complex tax collection problems which arise in a market economy. New tax laws can - at least in principle - be designed and approved in a relatively short time, but achieving the administrative capability of successfully implementing the new legislation is bound to require much longer.⁹ The identification and proper taxation of the private enterprises, a category of subjects which may be completely new to the tax administration, is going to be difficult, and a key issue for the outcome of the fiscal transition. The dimensions of the problem are amplified by the very essential feature of the economic transformation, i.e. the shift of the core of production and income generation from public to private enterprises. In some near future, the tax administration may find itself a completely obsolete machine, unable to tax income and wealth where they are going to be produced and accumulated. This argument is probably quite correct, as we document in the next section.

⁸ See for example Tanzi (1991 and 1993) and Stiehler (1993).

⁹ As to new laws, in Poland, for example, the Enterprise Income Tax (EIT) and the Personal Income Tax (PIT) were introduced in 1992, while Value-Added Tax (VAT) was introduced in 1993.

Another important issue - stressed by almost all studies of fiscal aspects of transition - is the decline of profitability in the public enterprises sector during transition, and the corresponding decline in profit tax payments.¹⁰ A first explanation of the fall of profits is provided by the recession that has accompanied the reform. An extensive literature has been produced on the latter topic.¹¹ The factors commonly cited include the collapse of CMEA trade (see Rodnik, 1992) and the credit squeeze (see Calvo and Coricelli, 1992). Other common explanations of the fall of SOEs profitability are (i) the increase of labor unit costs, (ii) the disappearance of windfall profits due to hyperinflation and historical costs accounting, (iii) higher costs of energy and other imported production goods, (iv) the inability of management's inability to deal with the new system and (v) the management's attempts to "hide" profits.¹² More generally, there is a wide consensus that - although some success cases do exist (see Pinto et al., 1992, on Polish SOEs) - the overall performance of the public enterprise sector has considerably worsened during transition.

However, in a socialist system, the data on SOEs profits tell only one side of the story of enterprises performance. The SOEs performance - and profitability - is in fact closely interconnected with cross-subsidization, which needs to be given due consideration in the analysis. Although the cut in subsidies during transition has been widely acknowledged in the literature, its consequences on the SOEs profitability - and, therefore, profit tax payments - have been surprisingly disregarded.

On the expenditure side, the transition to market brings - as just mentioned - deep cuts in producer and consumer subsidies, as well as a dramatic surge in transfers to households. The subsidies cut is a crucial part of any liberalization package. However, it may not include some goods - for example, some basic food items or specific intermediate goods - to help maintain the

¹⁰ See, one for all, Stiehler (1993).

¹¹ For a brief review of the main issues, see Bruno (1992, section V).

¹² On one or more of these issues, see for example Schaffer (1992), Estrin et al. (1992), Schwartz et al. (forthcoming) and Bruno (1992).

political viability of the reforms or avoid the bankruptcy of key enterprises. The rapid expansion of the social security system - in all its components: unemployment benefits, social insurance, social assistance - is also directly related to the economic transformation process. Three years of reforms, however, suggest that earlier expectations about the evolution of social expenditures failed to size appropriately the magnitude of the problem. In particular, as we will see, the expected surge in recession-related benefits has been more than overwhelmed by the use that has been made of the pension system as an absorber of surplus labor previously hidden in the SOEs.

Finally, the switch to a market economy brings about increased expenditure related to the need to make quasi-fiscal deficits previously hidden in the banking sector an explicit budget item. This point has been stressed by many, particularly inasmuch as it implies that, at the early stages of the economic transformation, targeting the fiscal deficit may not be very meaningful (Bruno, 1992, and Tanzi, 1993; see also Schwartz et al., forthcoming).

III. REVENUE- VS. EXPENDITURE-BASED EXPLANATION OF THE FISCAL CRISIS: EVIDENCE FROM POLAND, HUNGARY AND CZECHOSLOVAKIA.

In the previous section we discussed the main forces that can be expected to play a role in the evolution of the fiscal accounts in economies in transition. In this section, we offer evidence from Poland, Hungary and Czechoslovakia which contrasts two separate approaches. The first is emphasized by most of the existing literature, and stresses the strong decline in fiscal revenues as the main culprit for the fiscal crisis. In a nutshell, deep expenditure cuts, particularly on the subsidy side, have been insufficient to counteract the ruinous decline in income tax payments from enterprises (mainly SOEs).

In the second approach, we argue instead that the revenue crisis is largely overestimated. In particular, the profit tax decline observed under the new system is ephemeral. In a socialist economy enterprises profits are conceptually different from those of enterprises operating in a market economy. The performance of socialist enterprises is heavily affected by the centrally planned determination of relative producer prices - i.e., cross-subsidization. Accordingly, gross profits are a poor indication of the SOEs' contribution to the economy's value added and to fiscal revenues. A more meaningful measure is instead provided by profit taxes net of producer subsidies. We provide evidence consistent with this approach, and find that the net contribution of the enterprise sector to government finances has - if anything - increased during transition, in all the countries considered. This is the basis for what we call the expenditure-based explanation of the fiscal developments in transition economies. In the remainder of the discussion in this section, we utilize different decompositions of the change in the general government deficit in Poland, Hungary and Czechoslovakia between 1986-88 (or 1985-87 for Poland) and 1991-92.

We chose the periods so that they would be as representative as possible, for each country, of the fiscal performance under the two distinct regimes.¹³

III.1. The Traditional View of the Fiscal Crisis

Although the direct and indirect budgetary consequences of transition are numerous and complex, the heart of the matter, according to the "traditional" view, seems to be as follows. We take two periods (1985-87 or 1986-88 and 1991-92) that can be representative of pre- and post-transformation fiscal performance in central Europe (table 3.1).

Table 3.1 Poland, Hungary and Czechoslovakia: Evolution of Deficit , 1986-1992.									
(Percent of GDP)	Poland			Hungary			Czechoslovakia		
	1985-87	1991-92	Change	1986-88	1991-92	Change	1986-88	1991-92	Change
General Govt Balance	-0.4	-5.4	-5.0	-2.2	-5.3	-3.0	-1.7	-2.8	-1.1
Revenues	48.2	41.3	-6.9	61.3	53.3	-8.0	64.6	52.8	-11.9
Profit taxes	11.1	5.8	-5.3	10.5	4.0	-6.5	18.6	12.7	-5.8
Turnover Taxes 1/	11.5	7.2	-3.3	17.3	13.4	-4.0	15.8	12.7	-3.1
Expenditures	48.5	46.6	-1.9	63.5	58.6	-5.0	66.4	55.6	-10.8
Transfers to H'holds	9.9	19.7	9.9	13.7	24.4	10.7	11.8	16.3	4.4
Subsidies	16.2	5.0	-11.2	15.6	5.6	-9.9	26.3	7.9	-18.5
Interest	0.9	2.2	1.3	1.8	3.9	2.1	0.0	0.8	0.8
Capital Expenditures	5.3	3.0	-2.3	8.0	6.3	-1.7	2.0	4.9	2.9
Sources: Ministries of Finance; World Bank staff estimates.									
1/ In Hungary it includes VAT.									

¹³ In Poland, for example, the data for 1989 and 1990 are highly distorted by two phenomena that make their interpretation hopeless: the hyperinflation of 1989 and the subsequent increase in paper profits in enterprises in 1990 (see Barbone, 1992 and Schaffer, 1992). We also checked the sensitivity of the results with respect to the period chosen, and found that the broad picture is not altered by considering different periods.

The general government balance deteriorated considerably between these two periods in both Poland and Hungary, and only modestly in Czechoslovakia. This deterioration is the result of parallel trends in both revenues and expenditures. During the period under consideration, government revenues in fact decreased considerably, by as much as 8-12 percent of GDP. In turn, the main cause of this drastic fall is tax revenues from public enterprises. Tax collection from both private enterprises and individuals increased, but far less than necessary to offset the former impact.

On the expenditure side, the increase in transfers to households - by 5-11 percent of GDP - is more than offset by the cut subsidies - by 11-19 percent of GDP -, so that overall total government expenditures *decrease* - by 4-11 percent of GDP. However, overall the reduction in government revenues was too large to be offset by the decrease in government expenditure, particularly in Poland and Hungary. Hence the emergence of the fiscal crisis. This can be considered the heart of the "traditional" approach to fiscal crisis during transition in Poland and Hungary.

In Czechoslovakia, on the other hand, the decrease of government expenditure was larger than in Poland and Hungary, and it almost matched the decrease of government revenues. This is mainly due to the fact that transfers to households increased much less in Czechoslovakia. Such transfers account for a large fraction of government spending in all these countries, and they almost doubled in size - relatively to GDP - in Poland and Hungary, while they increased by less than 40 percent in Czechoslovakia. We will return to this issue, which, as we argue, is the single most important factor behind the fiscal crisis in transition economies.

III.2. A Revenue Crisis?

The data just shown, however, needs to be better interpreted. As mentioned in the previous section, one of the most important features of a socialist economy is the centrally planned determination of prices for both producer and consumer goods. Profits of socialist enterprises

do not have conceptually much in common with their market counterparts, but are rather determined, to a large extent, by the structure of relative prices, which is set administratively. Implicitly, sectors - and therefore enterprises - are divided by the central planner between "bad" and "good" ones, and relative prices are chosen so as to penalize the former and artificially promote the financial performance of the latter. The resulting inflated profit tax revenues received from "good" enterprises are then used to "cover the losses" of the discriminated-against enterprises, through cross-subsidization. In a market economy - without any cross-subsidization - gross profits are relatively smaller, but the need for compensatory subsidies for loss-makers is correspondingly reduced. These considerations suggest that any meaningful comparison across time and economic regimes of the overall enterprise sector performance needs to focus on profits *and* (producer) subsidies together, that is, on the overall *net* direct contribution to fiscal revenues. Only in this way we can adequately capture the evolution of the budget-enterprises fiscal relations, at a time when the intermediation role of the state comes to an end.

The traditional view of the fiscal crisis cannot be faulted for attributing a large share of responsibility to the SOE performance. On the face of it, profit tax revenues collapsed in Poland from 11 percent of GDP in 1986 to 4.5 percent in 1992, in Hungary from 11 percent of GDP to 2 percent, and in Czechoslovakia from 18 percent to 12 percent (figures are rounded to unity; see Appendix Tables A.1, A.2 and A.3).¹⁴

The point that is not adequately stressed in these figures, however, is that the fall in profitability is in itself largely attributable to the fall in subsidies. The reduction in subsidies in the three countries considered has indeed been dramatic (see Tables A.1-3 in the Appendix). They decreased in Poland from about 16 percent of GDP in 1986 to 3.6 percent of GDP in 1992, in Hungary from 17 percent of GDP to 4 percent, and in the former Czechoslovakia from 25 percent to 7 percent. Even more strikingly, virtually all the cuts took place in only three years in Poland (1989-1991) and two in Czechoslovakia (1990-1991), showing the early determination of these

¹⁴ Data on profit tax and turnover tax refer to, respectively, Enterprise Income Tax and VAT, for the countries/years in which they have been replaced by the latter. See Tables in the Appendix for more detail.

governments to get rid of the old economic system. The process in Hungary has been somewhat more gradual, with the cuts evenly spread over 1987-1992. The distribution of the few remaining subsidies varies across countries. They are mainly consumer subsidies in Poland (including subsidies on housing), and producer subsidies in Hungary and Czechoslovakia. A major category of consumer subsidies in all three countries - almost entirely eliminated by the reforms - used to be on food products. Major categories within producer subsidies included subsidies on energy and intermediate goods.¹⁵

We thus reclassify fiscal data as follows. We obtain "net profit taxes" by subtracting producer subsidies from profit tax revenues. Analogously, we obtain net total revenues and net total expenditures - i.e., net of cross-subsidization.

III.3. Fall in Revenues or Rise in Expenditures?

Table 3.2 presents a decomposition of the change in the general government deficit between 1986-88 and 1991-92 in Poland, Hungary and Czechoslovakia. The structure of the table is very similar to Table 3.1, except that it includes data on profit taxes, revenues and expenditures net of cross-subsidization.

The deterioration in the general government balance during the period is thus unchanged: 5 percentage points of GDP in Poland and 3 percentage points in Hungary. This deterioration can now however be evenly decomposed in both countries into a *decrease* in net revenues (which fall between 0.4 and 3.1 percent of GDP in the three countries) and an *increase* in net expenditures for Poland and Hungary (4.5 and 1.4 percent of GDP, respectively). The former Czechoslovakia, on the other hand, sees also a decrease in net expenditures as well, resulting in a worsening of the fiscal deficit of only one percentage point of GDP.

¹⁵ It goes without saying that the subsidies shown in the fiscal budget are not the only ones in the economy. "Cheap" loans, specific contracts between enterprises and the government and some government regulations can all - under certain circumstances - be considered implicit subsidies. This is one of the arguments used to criticize the fiscal deficit as a measure of macroeconomic efficiency (Tanzi, 1993, and Schwartz, forthcoming)

Table 3.2 Poland, Hungary and Czechoslovakia: Evolution of Deficit - An Alternative Decomposition, 1986-1992. (percentage of GDP, average over specified periods)									
	Poland			Hungary			Czechoslovakia		
	1985-87	1991-92	Change	1986-88	1991-92	Change	1986-88	1991-92	Change
General Government Balance	-0.4	-5.5	-5.0	-2.2	-5.3	-3.0	-1.7	-2.8	-1.
Net Revenues	41.1	40.6	-0.5	51.6	50.0	-1.6	49.5	46.4	-3.
Net profit taxes	4.0	5.1	1.1	0.7	0.7	0.0	3.5	6.4	2.
Turnover Taxes	11.5	8.2	-3.3	17.3	13.4	-4.0	15.8	12.7	-3.
Net Expenditures	41.5	45.9	4.5	53.8	55.2	1.4	51.3	49.2	-2.
Transfers to H'holds	9.9	19.7	9.9	13.7	24.4	10.7	11.8	16.3	4.
Consumer Subsidies	9.1	2.9	-6.3	5.8	2.3	-3.5	4.1	0.0	-4.
Interest Payments	0.9	2.2	1.3	1.8	3.9	2.1	0.0	0.8	0.
Capital Expenditures	5.3	3.0	-2.3	8.0	6.3	-1.7	2.0	4.9	2.9
Sources: Ministries of Finance; Authors' estimates									

The decline in net revenues common to the three countries, however, is due to altogether different reasons than the ones seen in table 3.1. The most important fact emphasized by table 3.2 is in fact that the *net* contribution of the enterprise sector to the fiscal budget has *increased* during transition, by 1.1 percent of GDP in Poland and by almost 3 percent in Czechoslovakia and has not changed substantially in Hungary. Despite the shrinkage in the tax base due to the recession, therefore, the transition to the market economy appears to have benefitted general government finances, at least in their direct relation with the enterprise sector.

The main factor underlying the decline in revenues, on the other hand, was provided - in all countries - by the relative decline of turnover taxes, which shrunk by 3-5 percent of GDP. In Poland, such decrease is partially due to the fact that the prices of the goods which account for most of the tax revenue - spirits, petroleum product and tobacco - have not kept pace with the

inflation rate, particularly in 1989 and 1990. Collectability issues also played a role, as delays in the payment of the tax increased sharply in those same years.¹⁶

The reclassification of the data in table 3.2 also evidences an increase (rather than a dramatic fall as seen before) in expenditures of the general government (again, with the exception of Czechoslovakia). Netting out the cross-subsidization effect reveals increased outlays from the state, mostly on transfers to the population¹⁷. It is on this basis that we can thus conclude that the fiscal crisis in central Europe is largely *an expenditure, rather than a revenue phenomenon*.

IV. ELEMENTS OF THE FISCAL CRISIS

This section reviews developments in revenues and expenditures in the three countries as seen under the interpretation provided in the preceding paragraphs.

IV.1. Exploding Social Security Expenditures.

The importance of social security spending in explaining the fiscal performance of Czechoslovakia vis-a-vis Poland and Hungary was already clear within what we called a "traditional" approach to the subject (see previous section). It is even more so from our alternative perspective. Indeed, the former Czechoslovakia strikes as the only country where net government expenditure *decreased* during transition, rather than increasing. The main explanation is provided -as data in Table 3.2 shows - by the uneven developments across countries in social security expenditures. Social security outlays provide the bulk of general government expenditures. In Poland and Hungary they accounted in 1992 for almost half of total

¹⁶ See Bolkowiak (1993). In 1989, for example, collection orders ceased to be applied to tax charges, weakening the enforcement of tax collection.

¹⁷ In fact, one could define the "net contribution" of the household sector in fashion similar to that defined for the SOE sector. Although there are some methodological problems (since the introduction of the personal income tax makes pre- and post-liberalization comparisons difficult), the data would show an increase in net payments to the household sector even when the effect of the reduction of direct subsidies to households is taken into account.

expenditures, and for about 30 percent of total in Czechoslovakia. As a matter of fact, expenditures on social security increased from 1986-88 to 1991-92 by about 80 percent in Hungary and 90 percent in Poland, but by less than 40 percent in Czechoslovakia. In 1986, the share of GDP spent on social security in Czechoslovakia was two points higher than in Poland and only one percentage point lower than in Hungary. The same figure in 1992 is four percentage points lower than in Poland and almost ten percentage points lower than in Hungary.

Table 4.1 Poland and Czechoslovakia: Annual Increases of Number of Pensioners, 1986-92. (annual % increase)							
	1986	1987	1988	1989	1990	1991	1992
Poland							
Total	2.1	2.8	3.0	2.4	4.1	11.8	6.9
Non-farmers (FUS)	1.6	1.8	2.0	1.6	2.3	9.9	5.7
Old age	0.8	1.2	1.3	0.9	3.9	17.9	..
Disability	2.4	2.5	2.6	2.3	1.6	6.0	..
Surviving	2.4	2.7	2.3	2.9	1.4	1.7	..
Farmers (KRUS)	4.4	7.2	7.0	5.7	11.1	18.9	11.2
Czechoslovakia 1/							
Total	..	0.9	0.2	2.5	1.1	2.1	1.2
Old Age	..	1.6	0.2	2.4	2.1	3.1	1.5
Disability	..	0.7	0.6	0.6	1.5	2.6	2.2
Surviving	..	0.4	0.3	0.3	0.6	0.7	0.0
Other	..	-4.0	-1.7	24.1	-10.6	-7.4	-5.6
Source: Biuletyn Statystyczny and Rocznik Statystyczny, several issues; Statisticka Rocenka 1989, 90 and 1992, and Czech Republic Bureau of Statistics. 1/ Data for 1992 refer to Czech pensioners only. However, they account for about three fourths of the pensioners of former Czechoslovakia.							

To some extent, the increase in social security spending was a necessary consequence of transition. However, the data for Poland and Hungary - particularly if compared to Czechoslovakia - strongly suggest that the system has been stretched well over its institutional

functions, in order to absorb some of the social distress brought by the transition. The main data are summarized in Tables 4.1 and 4.2.

In Poland, the total number of pensioners increased by almost 25 percent between 1990-92, whereas annual growth rates had ranged between 2 and 3 percent in previous years. Even more revealing are some disaggregated data. For example, the number of old age non-farmers pensioners increased by 18 percent in 1991, after increasing by average by only 1 percent per year in the period 1986-1990. Although the misuse of retirement and disability pensions reached its peak in the aftermath of the reforms (1990-91), it still continued to a significant extent in 1992.

These developments are closely interconnected with the massive process of labor force reallocation and/or reduction that has taken place in Poland from 1989 to 1992. During these four years, employment in state-owned enterprises decreased by as much as 40 percent, and employment in the public sector - SOEs and general government - by almost 30 percent. Overall, employment in Poland fell by 12 percent in the period 1989-92. In response to that, unemployment benefits - which did not exist in 1986 - increased to almost 2 percent of GDP in 1992. However, given the size of the phenomenon, the burden of absorbing the reduction in employment spilled over to the rest of the social security system.

This spill-over was made possible by a combination of liberal legislation, loose application of the existing rules and collusion between firms and employees at the expense of social security funds. The main factors - common to other transition economies - include generous eligibility conditions for early retirement and disability pensions, and high replacement ratios. As argued by Maret and Schwartz (1992) - the social insurance system has ended up playing a role that should have been assigned to social assistance programs and other proper safety net provisions.

The picture is rather different in the former Czechoslovakia. Formal employment there decreased by about 12 percent during 1989-92, a figure comparable to Poland. However, the

The different outcome is probably explained by differences in the social security legislation across the two countries, as well as the administrative application of the existing rules. A detailed analysis of such differences is outside the scope of this paper, although the relevance of such study is enhanced by our results. We only note here that, more generally, the political and social environment in which the reforms took place was also completely different in the two countries.

	1986	1987	1988	1989	1990	1991	1992
Poland 1/	95.8	100.0	101.4	105.6	92.3	103.1	94.4
Czechoslovakia 2/	..	100.0	104.2	117.6	107.5	80.0	71.2

Source: Biuletyn Statystyczny and Rocznik Statystyczny, several issues; Statisticka Rocenka 1989, 90 and 1992, and Czech Republic Bureau of Statistics.
1/ Data refer to average across all pensions (old age, disability, surviving).
2/ Czech Republic only (which, however, accounted for about three fourths of CSFR pensions).

Data refer to average old age pension.

A final important remark. The moderate increase in social spending in the former Czechoslovakia seems to have been achieved - to some extent - also through important cuts in pensioners' living standards. The average old age real pension decreased by 25 percent in 1991, and by a further 11 percent in 1992.¹⁸ They have somewhat recovered more recently. On the contrary, Polish pensioners were shielded from inflation throughout the transition process: the average real pension in 1992 was roughly at 1986 levels. (table 4.2)

With respect to the increase in social security expenditure in Hungary, the relevant issues are similar to Poland's. They include a wide misuse of disability pensions and sick-pay, and growing arrears in contributions from enterprises. However, the unusual size of social security spending in Hungary vis-a-vis Poland and Czechoslovakia is also due to the fact that, since 1990, health care has been taken over by the newly created Social Insurance Fund.

Two final remarks on expenditures. Interest payments have not posed a fiscal problem so far, with the exception of Hungary - where they doubled during transition, reaching over 4 percent of GDP in 1992. In the future, however, debt service might become more problematic in Poland as well, if present fiscal trend continues.

Capital expenditure has unsurprisingly borne a considerable part of the burden of fiscal adjustment¹⁹, and has been reduced considerably in real terms in all three countries. In Hungary and Czechoslovakia the decline (about 20 percent) has been somewhat more moderate than in Poland (40 percent). These developments are a clearly undesired by-product of fiscal tightening during transition. This problem - and some relevant policy suggestions addressed mainly to the international lending community - are discussed in Tanzi (1993).

¹⁸ Such data refer to the Czech Republic only (which, however, accounted for about three fourths of CSFR pensioners).

¹⁹ For Czechoslovakia, we add "capital transfers to enterprises" to proper "capital expenditure", to obtain total government investment.

IV.2. Tax Revenues from Private Enterprises: Evidence from Poland.

A valid concern expressed regarding the future evolution of tax revenues is that the combination of (i) the rapidly increasing share of GDP produced by the private sector and (ii) the severe problems faced by the government in order to properly tax it might lead to future problems.

Poland and Hungary have the most developed private sectors in Eastern Europe. They accounted, respectively, for approximately 50 percent and 35 percent of GDP in 1992. The former Czechoslovakia follows behind, with about 15 percent of its GDP being produced by private enterprises in that year.²⁰ The history of the private sector is of course also quite different across countries, but the number and importance of private enterprises has been rapidly growing in all the countries considered. This calls into question the problem of the proper taxation of the private sector (see Tanzi, 1991, and McKinnon, 1991).

The extent of this problem (if any) has not yet, to our knowledge, been sufficiently documented. We present here some data on tax compliance by the private sector that are now available for Poland (Table 4.3).²¹ They span 1991, 1992 and the first half of 1993, and are disaggregated by sector.

The evidence is mixed. The share of total turnover tax and profit tax payments accounted for by the private sector is clearly lower than the corresponding share of total revenues - roughly by a half. This pattern is consistent in the whole period covered by the data. In the first half of 1993, private enterprises - all sectors - accounted for about 30 percent of total revenues, but only about 14 percent of profit tax payments and 15 percent of turnover tax payments. In industry - from which originates most of the total turnover taxes and profit taxes paid in the economy - private

²⁰ World Bank staff estimates.

²¹ Data refer to medium and large enterprises, defined as those with more than 50 employees in industry and construction, and more than 20 in the other sectors.

enterprises accounted for about 17 percent of revenues, but less than 12 percent of turnover tax payments and less than 8 percent of profit tax payments.

Table 4.3. Poland: Medium and Large Private Enterprises. Turnover Tax and Income Tax Payments. (private sector shares of total)									
	1993 2/			1992			1991		
% of total 1/	revenues	turnover tax	profit tax	revenues	turnover tax	profit tax	revenue s	turnover tax	profit tax
Total	30.5	14.9	13.9	28.1	13.1	13.3	27.4	10.2	13.3
Industry	17.5	11.6	7.7	14.9	9.5	7.1	10.6	5.8	7.1
Construction	57.6	71.9	52.0	49.3	59.0	46.2	26.4	38.3	46.2
Agriculture	17.3	19.5	19.2	43.2	53.8	14.9	54.3	15.1	14.9
Transportation	14.7	42.9	15.0	14.8	42.2	11.3	8.0	30.0	11.3
Communic.	2.2	6.7	0.3	1.9	7.1	0.4	1.1	28.6	0.4
Trade	53.6	63.1	34.7	48.3	61.9	29.0	56.8	45.0	29.0

Source: GUS (1992, 1993a and 1993b). See references.
Medium and large enterprises are those with more than 50 employees in industry and construction, and more than 20 employees in other sectors.
1/ The total refers to all medium and large enterprises.
2/ First and second quarter only.

However, at least with regard to turnover tax, the tax compliance of private enterprises - in all sectors - appears to be improving. In fact, their share in turnover tax payments increased by about 50 percent from 1991 to 1993, while the share of revenues increased by only about 10 percent. On the contrary, the profit tax compliance has worsened. For example, in the industry sector - which accounted for about 60 percent of total profit tax in 1993 - private enterprises' share of revenues has increased since 1991 by about 70 percent, while its share of profit tax payments by only about 10 percent.²² As it does not seem logical to assume that private enterprises would be

²² The explanation for such performance is suggested by some other data available from the same source. In fact, the data on costs and profits reported there would imply a markedly higher profitability in the public sector than in the private one. The profits reported by medium and large private enterprises are only 16 percent of total profits within the category, while their sales are 28 percent of the total. Also, in 1992, more private businesses reported losses, in both absolute and relative terms, than public ones. Even allowing for a good performance of a few public managers,

less profitable than SOEs, this pattern seems to point to a better ability of private entrepreneurs to hide their profits through creative accounting (evasion on turnover tax is in fact more difficult to accomplish).

V. CONCLUSIONS

The main message of this paper, namely that the fiscal crisis in central Europe was mainly attributable--in the early 1990s--to increasing social expenditures, rather than to the collapse in enterprise profitability, is not intended to minimize the importance of the continued reform of the tax system and of tax administration. In fact, the data on private sector participation in taxation in Poland that we show suggest that that sector is likely to be a less willing complier with the requirements of the fiscal system. To the extent that privatization advances, maintaining an adequate buoyancy for the tax system might become more problematic, unless tax reform continues with vigor.

The paper, however, also sends a cautionary message regarding the possibility of financing further increases in expenditures. On a net basis, the decrease in revenues that has accompanied the economic transformation is limited. All three countries examined in this paper appear to already have levels of taxation that are higher than comparators at similar per-capita income levels, and approximate or surpass those of western Europe. While no iron law exists here, society at large may not be willing to provide the resources that would be required to support the current level of expenditures or to extend it even further.

these data overall simply suggest a widespread phenomenon of profits hiding and, in general, tax cheating in the private sector.

REFERENCES

- Barbone, L. (1992). "How Much Did the Fiscal Sector Gain from Hyperinflation? The 1990 Fiscal Surplus Revisited." World Bank, Central Europe Department, Manuscript, April.
- Barr, N. (1992). "Economic Theory and the Welfare State: A Survey and Interpretation." *Journal of Economic Literature* 30 (2): 741-803.
- Bolkowiak, I. (1993). "Fiscal Policy in Poland 1990-93." *Institute of Finance Working Papers* No. 32, Warsaw: Instytut Finansow.
- Bruno, M. (1992). "Stabilization and Reform in Eastern Europe: A Preliminary Evaluation." *IMF Working Paper* No. WP/92/12.
- Calvo, G. A. and F. Corricelli (1992). "Stagflationary Effects of Stabilization Programs in Reforming Socialist Countries: Enterprise-Side and Household-Side Factors." *The World Bank Economic Review* 6 (1): 71-90.
- Chand, S.K. and H.R. Lorie (1992). "Fiscal Policy." In V. Tanzi, ed., *Fiscal Policies in Economies in Transition*, Washington, DC: International Monetary Fund, 1992.
- Charap, J. and A. Zemplerova (1993). "Restructuring in the Czech Republic." *EBRD Working Papers* No. 2, March.
- Estrin, S., M. Schaffer and I. Singh (1992). "Enterprise Adjustment in Transition Economies: Czechoslovakia, Hungary and Poland." Paper presented at the Conference on the Macroeconomic Situation in Eastern Europe, held by the International Monetary Fund and the World Bank, in Washington, D.C., 4-5 June 1992.
- Gandhi, V.P. (1993). "Fundamental Fiscal Reform in Poland: Issues of Design and Implementation." In V. Tanzi, ed., *Transition to Market: Studies in Fiscal Reform*, Washington, D.C.: International Monetary Fund.
- Gandhi, V.P. and D. Mihaliek (1992). "Scope for Reform of Socialist Tax Systems." In V. Tanzi, ed., *Fiscal Policies in Economies in Transition*, Washington, DC: International Monetary Fund, 1992.
- GUS (1992). *Wyniki Finansowe Przedsiębiorstw*, I-IV 1991, Warsaw: Główny Urząd Statystyczny, June.
- GUS (1993a). *Wyniki Finansowe Podmiotów Gospodarczych*, I-IV 1992, Warsaw: Główny Urząd Statystyczny, May.

- GUS (1993b). *Wyniki Finansowe Podmiotow Gospodarczych*, I-II 1993, Warsaw: Glowny Urzad Statystyczny, September.
- Hemming, R. (1992). "Privatization of State Enterprises." In V. Tanzi, ed., *Fiscal Policies in Economies in Transition*, Washington, DC: International Monetary Fund, 1992.
- Johnson, S. (1992). "Private Business In Eastern Europe." World Bank, Policy Research Department, Manuscript.
- Kopitz, G (1991). "Fiscal reform in European Economies in Transition." *IMF Working Paper* No. WP/91/43, April.
- Kopitz, G. (1993). "Hungary: A Case of Gradual Fiscal Reform." In V. Tanzi, ed., *Transition to Market: Studies in Fiscal Reform*, Washington, D.C.: International Monetary Fund.
- Kornai, J. (1992). *Socialist Systems: The Political Economy of Communism*. Princeton, NJ: Princeton University Press.
- Lipton, D. and J. Sachs (1990). "Privatization in Eastern Europe: The Case of Poland." *Brookings Papers on Economic Activity* 2: 293-333.
- Maret, X. and G. Schwartz (1993). "Poland: the Social Safety Net during the Transition." *IMF Working Paper* No. WP/93/42, May.
- McKinnon, R. I. (1991). *The Order of Economic Liberalization*. Baltimore: Johns Hopkins University Press.
- Musgrave, R. (1959). *The Theory of Public Finance*. New York: McGraw-Hill.
- Musgrave, R. (1968). *Fiscal Systems*. New Haven: Yale University Press.
- Pinto, B., M. Belka and S. Krajewski (1993). "Transforming State Enterprises in Poland." *World Bank Working Paper* No. WPS 1101, February.
- Prust, J. (1993). "The Czech and Slovak Federal Republic: Government Finances in a Period of Transition." In V. Tanzi, ed., *Transition to Market: Studies in Fiscal Reform*, Washington, D.C.: International Monetary Fund.
- Rodnik, D. (1992). "Making Sense of the Soviet Trade Shock in Eastern Europe: A Framework and Some Estimates." Paper presented at the Conference on the Macroeconomic Situation in Eastern Europe, held by the International Monetary Fund and the World Bank, in Washington, D.C., 4-5 June 1992.

- Schaffer, M. (1992). "The Enterprise Sector and Fiscal Performance in Poland 1990-91." London School of Economics, *Center for Economic Performance Working Paper* No. 280.
- Schwartz, G., M. Stone and T. van der Willigen (forthcoming). "Beyond Stabilization: The Economic Transformation of Czechoslovakia, Hungary and Poland." In D. Gros and A. Steinherr, eds., *Winds of Change in Central and Eastern Europe*, London: Longmans Publishers.
- Stiehler, U. (1993). "Recent Government Behavior in European Transition Economies and Some Policy Implications." International Monetary Fund, Manuscript.
- Stiglitz, J. and A. Heertje (1989). *The Economic Role of the State*. Oxford: Basil Blackwell.
- Tanzi, V. (1991). "Tax Reform in Economies in Transition: A Brief Introduction to the Main Issues." *IMF Working Paper* No. WP/91/23, March.
- Tanzi, V., ed. (1993a). *Transition to Market: Studies in Fiscal Reform*. Washington, D.C.: International Monetary Fund.
- Tanzi, V. (1993b). "Fiscal Policy and the Economic Restructuring of Economies in Transition." *IMF Working Paper* No. WP/93/22, March.

Table A.1
Poland: Operations of the General Government, 1986-92.
(in percentage of GDP)

	1986	1987	1988	1989	1990	1991	1992
Total Revenues	49.4	46.9	48.0	33.8	43.0	39.8	42.8
Tax Revenues	47.0	44.6	46.3	30.3	37.8	34.7	38.0
Turnover Tax	11.6	10.6	10.8	7.2	6.3	7.4	9.1
Enterprise Income Tax 1/	11.0	11.4	12.7	7.9	14.0	7.2	4.5
Individual Income Tax 1/	3.8	3.6	3.5	2.8	3.0	2.0	7.1
Taxes on Foreign Trade	2.8	2.4	2.0	0.9	0.6	2.0	2.2
Payroll Tax	9.5	12.7	12.4	8.7	9.6	9.0	10.8
Other	8.2	3.8	4.9	3.7	4.2	7.0	4.5
(memo: priv. tax contr.)	2.0	2.2	2.4	2.1	2.7	2.9	3.5
Nontax Revenues	2.4	2.3	1.6	3.5	5.1	5.1	4.2
Total Expenditures	49.7	47.7	48.0	39.9	39.8	43.5	49.8
Current Expenditure	43.8	43.3	43.9	37.2	37.1	40.3	47.0
Wages (net)	1.3	1.5	1.5	2.0	3.3	5.2	7.6
Goods and Services	3.8	3.6	3.3	2.0	3.6	7.6	6.1
Subsidies	16.3	15.9	16.0	11.6	7.8	3.5	3.6
Consumer Subsidies	9.1	10.0	10.0	6.9	3.9	2.6	3.1
o/w Food	3.1	3.4	4.9	3.0	0.2	0.0	0.0
Housing	3.1	3.6	2.5	2.0	2.8	2.2	2.6
Producer Subsidies	7.1	5.9	6.0	4.7	3.9	0.9	0.5
Transfers to Households	9.7	9.4	9.5	9.2	11.2	17.8	21.6
Social Insurance	9.0	9.2	9.2	9.1	10.4	15.8	19.0
Labor Fund	0.5	0.1	0.1	0.1	0.6	1.6	2.1
Social Assistance	0.1	0.1	0.1	0.1	0.2	0.4	0.5
Interest	1.4	1.2	1.0	3.0	1.8	1.4	3.0
Other	11.4	11.8	12.7	9.4	9.4	4.8	5.2
Capital Expenditure	5.9	4.4	4.2	2.7	2.8	3.2	2.8
Surplus/Deficit (-)	-0.3	-0.8	0.0	-6.0	3.1	-3.7	-7.1

Source: Ministry of Finance; Authors' estimates.

1/ Before 1992, data refer to - respectively - Profits Tax (Income Tax) and Wage Tax.

	1986	1987	1988	1989	1990	1991	1992
Revenues	61.5	59.1	63.4	58.9	57.4	54.5	52.1
Tax Revenues	52.2	52.4	54.0	48.3	47.5	43.7	41.2
Ent. Income Tax	11.1	11.9	8.4	6.9	7.3	5.6	2.4
Ind. Income Tax	0.8	0.8	4.7	5.4	6.5	7.8	7.8
Turnover Tax 1/	15.0	15.3	21.7	17.1	16.5	13.5	13.2
Taxes on Foreign Trade	3.5	2.8	3.0	4.0	3.1	2.7	2.8
Payroll Tax	16.6	15.8	14.8	14.1	13.7	13	12.5
Other	5.2	5.8	1.4	0.7	0.4	1.1	2.5
Nontax Revenues	9.3	6.7	9.4	10.6	10.0	10.8	10.9
Expenditures	64.6	62.7	63.4	60.2	57.2	57	60.1
Current Expenditure	56.6	54.6	55.6	53.7	52.5	50.9	53.7
Wages	8.1	7.6	8.7	8.2	7.6	8.9	9.6
Goods & Services	11.4	12.0	12.8	12.1	11.2	9.1	9.5
Subsidies	16.6	16.2	14.0	12.5	9.6	7.1	4.2
Consumer Subsidies	6.3	6.2	5.0	6.6	5.5	3.7	1.0
Producer Subsidies	10.3	10.0	9.0	5.9	4.2	3.4	3.2
Transfers to Households	13.1	12.6	15.3	18.6	20.9	22.6	26.1
Interest Payments	1.3	2.6	1.6	2.4	3.2	3.4	4.4
Other	6.2	3.6	3.3	0.0	0.0	0.2	0.0
Capital Expenditure	8.0	8.1	7.7	6.5	4.6	6.1	6.4
Surplus/Deficit (-)	-3.1	-3.6	0.0	-1.3	0.4	-2.5	-8

Sources: Ministry of Finance; World Bank staff estimates.

1/ It includes, from 1989 on, VAT.

Table A.3
Czechoslovakia: Operations of the General Government, 1986-92.
(in percentage of GDP)

	1986	1987	1988	1989	1990	1991	1992
Revenues	63.1	65.2	65.6	69.5	61.2	52.8	52.7
Enterprise Income Tax	18.2	19.2	18.2	11.0	12.2	13.7	11.7
Individual Income Tax	6.9	7.0	6.9	6.9	6.7	6.1	7.7
Turnover Tax	15.9	15.6	15.8	17.7	18.0	12.6	12.8
Payroll Tax	5.9	6.3	6.6	15.0	14.4	11.0	10.3
Taxes on Foreign Trade	0.7	1.4	2.1	1.9	3.2	1.2	1.7
Other 1/	15.5	15.7	15.9	17.0	6.6	8.1	8.5
Expenditures	65.9	66.1	67.1	72.2	61.6	54.8	56.3
Current Expenditure	63.9	64.1	65.1	70.6	59.5	50.6	50.8
Wages	7.4	7.5	7.5	9.0	8.5	9.3	6.6
Goods & Services	15.8	16.5	17.1	16.2	16.1	15.1	19.7
Interest Payments	-	-	-	0.0	0.2	0.5	1.1
Transfers to Households	11.9	11.8	11.7	13.6	13.6	16.1	16.4
Social Insurance	..	..	..	..	11.7	12.1	13.4
Unemployment Benefits	-	-	-	-	-	0.6	1.1
Social Assistance	..	..	..	..	1.6	3.3	2.1
Subsidies	25.4	25.5	28.0	31.1	21.0	9.0	6.7
Current Transfers to Ent.	18.2	18.4	21	25	16.2	7.7	5
o/w Producer Subsidies	4.1	4.2	4.0	6.5	4.2	-	-
Capital Transfers to Ent.	7.2	7.1	7.0	6.1	4.8	1.3	1.7
Other	3.4	2.8	0.8	0.7	0.1	0.6	0.3
Capital expenditure	2.0	2.0	2.0	1.6	2.1	4.2	5.5
Surplus/Deficit (-)	-2.8	-0.9	-1.5	-2.7	-0.4	-2.0	-3.6
Stock adjustments 2/	-	-	-2.1	-1	-6.6	-	-
Surplus/Deficit (-)	-2.8	-0.9	-3.6	-3.7	-7.0	-2.0	-3.6

Sources: Ministry of Finance; IMF and World Bank staff estimates.

Note: Data before 1989 were not collected according to IMF Government Finance Statistics standards.

Data include Subsidized Organizations and Funds of Ministries.

1/ It includes Funds of Ministries revenues, which averaged 45 billions of koruny in 1986-88. In 1989, it includes other taxes on profits, which accounted for 7% of GDP.

2/ Includes transfers to cover debts of retail trade organizations (1988) and transfers to banks and foreign trade organizations to cover devaluation losses (1989-90).

Table A.4
Poland: Financial Position of Enterprises, 1986-92.
 (in billions of Zlotys)

	1986	1987	1988	1989	1990	1991	1992
Revenues	21938.7	28863.8	48540.9	153767.5	805396.6	1479957	1845404
Costs	19024.7	24454.7	40626.7	114967.3	629312.9	1390594	1786724
Gross Profits	2919.9	4439.5	8250.1	53418.1	188446.5	67439	38552
Gross Prof./Rev.	13.3	15.4	17.0	34.7	23.4	4.6	2.1

Source: Rocznik Statystyczny and Biuletyn Statystyczny, several years.

Table A.5
Hungary: Financial Position of Enterprises, 1986-92.
(in billions of forint)

	1986	1987	1988	1989	1990	1991	1992 1/
GDP	1088	1226	1435	1710	2079	2308	2782
Gross Labor Income	515.4	561.2	676.4	771.7	971.1	1207.3	1447.3
Tot. Gross Profits 2/	374	438	371	454	462	287	213
Profits/GDP	34.4	35.7	25.9	26.5	22.2	12.4	7.7

Source: Hungarian authorities; International Monetary Fund.

1/ Subject to revision.

2/ Before direct taxes and before subtracting depreciation.

2/ It includes extraordinary receipts.

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